

IN THE FIGURES:

Applicants respectfully request approval of the following drawing change. Figure 8 has been amended such that reference label 98 points at the radiation source center. Applicants hereby submit an “Annotated Copy” of Figure 8 showing the requested change in red permanent ink, and a “Replacement Sheet” incorporating the change to Figure 8. No new matter has been added.

Remarks

The Office Action mailed October 8, 2003 has been carefully reviewed and the following remarks have been made in consequence thereof.

Claims 1-2, 4-11, 13-17, and 21-29 are now pending in this application. Claims 8-10 are allowed. Claims 1, 2, 4, 11, 13, 14, and 18-20 stand rejected. Claims 3, 5-7, 12, 15-17, and 21-23 are objected to. Claims 21-23 are newly independent. Claims 24-29 are newly added. A fee calculation sheet for the newly independent claims and the newly added claims along with authorization to charge a deposit account in the amount of the calculated fee are submitted herewith.

The objection to Figure 8 is respectfully traversed. Figure 8 has been amended such that reference label 98 points at the radiation source center. For the reasons set forth above, Applicants respectfully request that the objection to Figure 8 be withdrawn.

The objection to Claims 8 and 18 is respectfully traversed. Claim 8 has been amended to include the word "source", and Claim 18 has been canceled. For the reasons set forth above, Applicants respectfully request that the objection to Claims 8 and 18 be withdrawn.

The rejection of Claims 1 and 11 under 35 U.S.C. § 102(b) as being anticipated by Reuveni (U.S. Pat. No. 4,682,291) is respectfully traversed.

Claim 3 was indicated in the Office Action as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 3 depends directly from Claim 1. Claim 3 has been canceled and independent Claim 1 has been rewritten to include all of the recitations from Claim 3. Accordingly, Claim 1 is submitted to be in condition for allowance, and as such, is submitted as patentable over Reuveni.

Claim 12 was indicated in the Office Action as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 12 depends directly from Claim 11. Claim 12 has been canceled and independent Claim 11 has been rewritten to include all of the recitations from Claim 12. Accordingly, Claim 11 is submitted to be in condition for allowance, and as such, is submitted as patentable over Reuveni.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1 and 11 be withdrawn.

The rejection of Claims 1, 4, 11, 14, 18, and 20 under 35 U.S.C. § 102(b) as being anticipated by Ueda et al. (U.S. Pat. No. 5,396,889) is respectfully traversed.

Claim 3 was indicated in the Office Action as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 3 depends directly from Claim 1. Claim 3 has been canceled and independent Claim 1 has been rewritten to include all of the recitations from Claim 3. Accordingly, Claim 1 is submitted to be in condition for allowance, and as such, is submitted as patentable over Ueda et al.

Claim 4 depends from independent Claim 1. When the recitations of Claim 4 are considered in combination with the recitations of Claim 1, Applicants respectfully submit that dependent Claim 4 likewise is patentable over Ueda et al.

Claim 12 was indicated in the Office Action as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 12 depends directly from Claim 11. Claim 12 has been canceled and independent Claim 11 has been rewritten to include all of the recitations from Claim 12. Accordingly, Claim 11 is submitted to be in condition for allowance, and as such, is submitted as patentable over Ueda et al.

Claim 14 depends from independent Claim 11. When the recitations of Claim 14 are considered in combination with the recitations of Claim 11, Applicants respectfully submit that dependent Claim 14 likewise is patentable over Ueda et al.

Claims 18 and 20 have been canceled.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1, 4, 11, 14, 18, and 20 be withdrawn.

The rejection of Claims 18 and 19 under 35 U.S.C. § 102(b) as being anticipated by Mihara (U.S. Pat. No. 5,805, 663) is respectfully traversed.

Claims 18 and 19 have been canceled.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 18 and 19 be withdrawn.

The rejection of Claims 2 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Reuveni (U.S. Pat. No. 4,682,291) in view of Hu (U.S. Pat. No. 5,663,995) is respectfully traversed.

Claim 3 was indicated in the Office Action as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 3 depends directly from Claim 1. Claim 3 has been canceled and independent Claim 1 has been rewritten to include all of the recitations from Claim 3. Accordingly, Claim 1 is submitted to be in condition for allowance, and as such, is submitted as patentable over Reuveni in view of Hu.

Claim 2 depends from independent Claim 1. When the recitations of Claim 2 are considered in combination with the recitations of Claim 1, Applicants respectfully submit that dependent Claim 2 likewise is patentable over Reuveni in view of Hu.

Claim 12 was indicated in the Office Action as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 12 depends directly from Claim 11. Claim 12 has been canceled and independent Claim 11 has been rewritten to include all of the recitations from Claim 12. Accordingly, Claim 11 is submitted to be in condition for allowance, and as such, is submitted as patentable over Reuveni in view of Hu.

Claim 13 depends from independent Claim 11. When the recitations of Claim 13 are considered in combination with the recitations of Claim 11, Applicants respectfully submit that dependent Claim 13 likewise is patentable over Reuveni in view of Hu.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 2 and 13 be withdrawn.

Claims 3, 5-7, 12, 15-17, and 21-23 were indicated as objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 3 was indicated in the Office Action as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 3 depends directly from Claim 1. Claim 3 has been canceled and independent Claim 1 has been rewritten to include all of the recitations from Claim 3. Accordingly, Claim 1 is submitted to be in condition for allowance.

Claims 5-7 depend from independent Claim 1. When the recitations of Claims 5-7 are considered in combination with the recitations of Claim 1, Applicants respectfully submit that Claims 5-7 likewise are in condition for allowance.

Claim 12 was indicated in the Office Action as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 12 depends directly from Claim 11. Claim 12 has been canceled and

independent Claim 11 has been rewritten to include all of the recitations from Claim 12. Accordingly, Claim 11 is submitted to be in condition for allowance.

Claims 15-17 depend from independent Claim 11. When the recitations of Claims 15-17 are considered in combination with the recitations of Claim 11, Applicants respectfully submit that Claims 15-17 likewise are in condition for allowance.

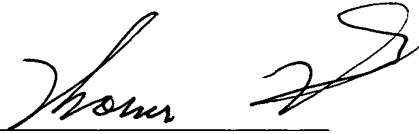
Claims 21-23 were indicated in the Office Action as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 21-23 have been rewritten in independent form including all of the limitations of the base claim and any intervening claims and as such are submitted to be in condition for allowance.

Accordingly, Applicants respectfully request that the objection to Claims 3, 5-7, 12, 15-17, and 21-23 be withdrawn.

With respect to newly added Claims 24-29, Claims 24-25 depend from independent Claim 21 which is considered in condition for allowance, Claims 26-27 depend from independent Claim 22 which is considered in condition for allowance, and Claims 28-29 depend from independent Claim 23 which is considered in condition for allowance. Accordingly, Applicants respectfully submit that newly added Claims 24-29 are in condition for allowance.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Thomas M. Fisher', is written over a horizontal line.

Thomas M. Fisher
Registration No. 47,564
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070

ANNOTATED MARKED-UP DRAWINGS

4/4

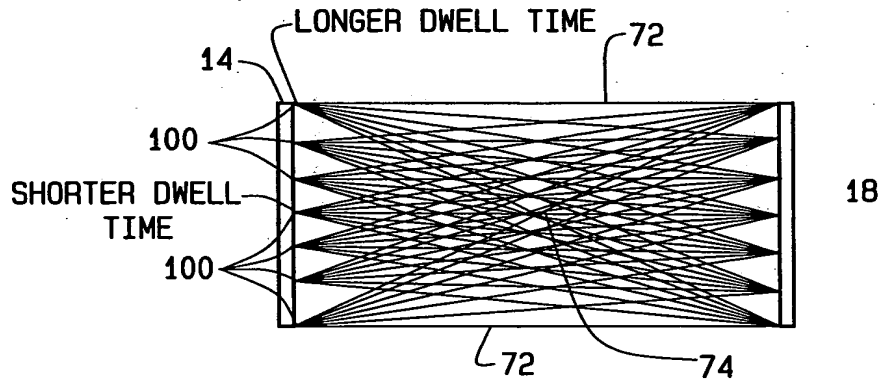
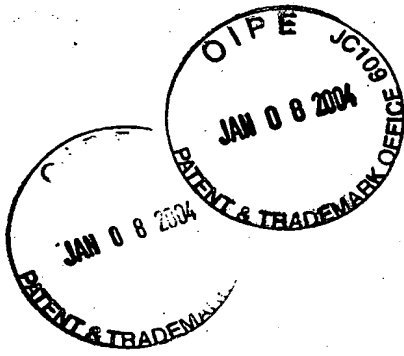


ILLUSTRATION OF DWELL TIME MODULATION APPROACH

FIG. 7

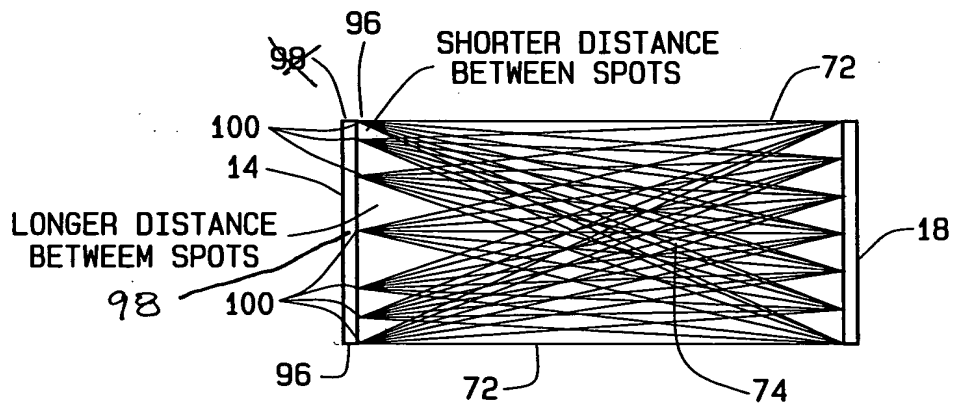


ILLUSTRATION OF UNEVENLY PACED X-RAY SPOTS

FIG. 8